

WHAT IS CLAIMED IS:

- 1 1. A cover body covering an air bag apparatus, the cover
2 body being integral with an interior panel of a vehicle, the
3 cover body comprising:
 - 4 a covering portion which is formed integrally with an
5 interior panel body, the covering portion having a door portion
6 defined by a tear seam formed in a closed-loop shape in a back
7 surface of the interior panel body, the covering portion being
8 made of polyolefin resin which has a flexural elastic modulus of
9 from 1500 to 3500 MPa, a tensile strength of from 17 to 40
10 MPa, an Izod impact strength of from 3.0 to 15.0 kJ/m², and an
11 elongation of 400% or less; and
 - 12 a backing portion which is joined to a back of the
13 covering portion including the door portion, the backing portion
14 being made of thermoplastic olefin which is softer and has a
15 greater elongation than the polyolefin resin;
 - 16 wherein the backing portion comprises a reinforcing
17 portion joined to a back surface of the door portion, a
18 surrounding base which is joined to the back surface of the
19 covering portion surrounding the door portion and having an
20 attachment portion, and a hinge portion having an end joined
21 to the reinforcing portion and another end joined to the
22 surrounding base.
- 1 2. The cover body as claimed in claim 1, wherein the hinge
2 portion comprises
 - 3 a first flat portion adjacent to the surrounding base,
 - 4 and

5 a second flat portion adjacent to the reinforcing
6 portion, so that the hinge portion is formed in a bent shape in
7 cross section.

1 3. The cover body as claimed in claim 1, further comprising
2 a joining rib disposed on the backing portion, the joining rib
3 arranged on a surface facing the back surface of the covering
4 portion and joined to the covering portion by vibration welding,
5 the joining rib comprising a first rib portion arranged in a first
6 direction along reciprocative movement of welding, and a
7 second rib portion arranged in a second direction which
8 intersects the first direction,

9 wherein at least a portion of the first rib portion having a
10 width equal to or not greater than three times the width of the
11 second rib portion.

1 4. The cover body as claimed in claim 1, wherein the hinge
2 portion is arranged intermittently along an edge portion
3 defined by the reinforcing portion and the surrounding base so
4 that the edge portion has a pair of intermittent edge portions
5 defined by a reinforcing edge portion and a surrounding edge
6 portion,

7 an extended supporting portion being formed at least
8 from one of the reinforcing edge portion and the surrounding
9 edge portion of the intermittent edge portions to the other of
10 the intermittent edge portions.

1 5. The cover body as claimed in claim 1, the cover body
2 further comprising a joining portion which tearably links the
3 reinforcing portion and the surrounding base.

1 6. The cover body as claimed in claim 1, wherein the hinge
2 portion is joined to an edge portion of the surrounding base at
3 a location away from the back surface of the covering portion,
4 so that the edge portion of the surrounding base forms a space
5 between the back surface of the covering portion and the hinge
6 portion.

1 7. The cover body as claimed in claim 5, wherein the hinge
2 portion is a curved shape which links the reinforcing portion
3 and the surrounding base, and the joining portion links the
4 reinforcement portion with a shorter length than a
5 circumferential length of the hinge portion.

1 8. The cover body as claimed in claim 3, wherein the first rib
2 portion is disposed along at least a portion of the tear seam,
3 the joining rib further comprising a third rib portion disposed
4 along a predetermined direction and having a width the same
5 as that of the second rib portion, the joining rib being formed
6 in high density in proximity to the tear seam.

1 9. The cover body as claimed in claim 3, wherein the joining
2 rib has a surface area in a range of from 10 to 30 percent of
3 the area of a surface facing the cover body defined by the
4 reinforcing portion and the surrounding base of the backing
5 portion.

1 10. The cover body as claimed in claim 4, wherein a center of
2 the hinge portion and a center of the tear seam are formed
3 with a relative off-center alignment in the surface direction.

1 11. The cover body as claimed in claim 7, wherein the hinge
2 portion comprises a curved surface portion which faces in a
3 direction opposite to a direction of expansion of an air bag
4 contained in the air bag apparatus, and the joining portion is a
5 straight shape.

1 12. The cover body as claimed in claim 6, wherein the hinge
2 portion comprises a U-shaped portion having two ends and a
3 curved surface portion defined therebetween, wherein one end
4 is linked to the reinforcing portion and another end is linked to
5 the surrounding base and a curved surface protrudes toward an
6 air bag stored within the air bag apparatus, and a lower joint
7 portion is arranged in the backing portion so that the lower
8 joint portion substantially superposes the tear seam of the
9 covering portion.

1 13. The cover body as claimed in claim 12, wherein the
2 surrounding base comprises a guide portion facing the space
3 portion to guide an edge portion of the door portion which is
4 formed by tearing of the tear seam.